

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 10/006,583

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. *(Currently Amended)* A method of providing communication between two or more control units connected to each other and to a master controller through a common bus, wherein the control units comprise ~~of a control apparatus that controls at least one electronic device which comprises two or more peripheral units,~~ wherein the method comprises the steps of:

~~providing a common bus;~~

~~connecting the two or more control units of the control apparatus through said common bus;~~

~~controlling[[,]] the through each control unit,~~ at least two one peripheral units ~~unit of the device to provide data essential to the operation of the peripheral units unit and to detect possible data variations in the said peripheral units, wherein each control unit: unit; and~~

~~providing a master controller connected to the common bus and further the steps, carried out by each of said control units, of:~~

~~submits submitting~~ information concerning data consumed and provided by the peripheral units controlled by said each control unit[[,]] to said master control; and

spontaneously sends ~~sending a message over the bus whenever at least one of the data provided by at least one of the peripheral units controlled by said each control unit varies.~~

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 10/006,583

2. *(Previously Presented)* A method according to claim 1, wherein the step of submitting information to the master controller comprises the step of each control unit transmitting to the master controller a structure of its own message comprising at least one of information provided and information received and used.

3. *(Original)* A method according to claim 1, wherein it further comprises the step of assigning a suitable address to each of said control units.

4. *(Currently Amended)* A method according to claim 1 wherein the step of spontaneously sending a message comprises ~~the step of~~ sending a message comprising a first portion and a second portion, said first message portion comprising information concerning the control unit that has detected a data variation in the data of at least one peripheral unit controlled thereby and information concerning control units that will consume the data in the sent message.

5. *(Previously Presented)* A method according to claim 4, wherein the information concerning the control units that will consume the data in the sent message comprise a logic address for representing a group of control units consuming the same data item.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 10/006,583

6. *(Previously Presented)* A method according to claim 1, wherein it comprises the additional step of providing each control unit with a counter that counts forward at each message sent by said each control unit.

7. *(Previously Presented)* A method according to claim 6, wherein it further comprises the step of writing the value of said counter into every message that is sent by said each control unit.

8. *(Currently Amended)* A method according to claim 1, wherein the step of spontaneously sending a message comprises ~~the step of~~ sending a message comprising at least one control bit to control regularity of the information exchange.

9. *(Currently Amended)* A method according to claim 1, wherein ~~it further comprising~~ comprises the ~~additional~~ step of disabling said master controller after having established the communication between said control units.

10. *(Currently Amended)* A method according to claim 1, wherein said peripheral units are devices ~~device is a device~~ for receiving, transmitting and processing signals in radio link systems.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 10/006,583

11. (*Currently Amended*) An apparatus for controlling ~~an electronic device which comprises two or more peripheral units~~, the apparatus comprising:

at least two control units, each control unit controlling at least one peripheral unit of the device to provide data necessary for the operation of the peripheral unit and detect possible data variations of said peripheral unit;

a common bus for connecting said two or more control units;

~~wherein the apparatus further comprises a master controller connected to the common bus, wherein and wherein there are provided, in each control unit comprises:~~

means for submitting, to said master controller, information concerning data consumed and provided by the peripheral unit ~~units that are controlled by a respective said each~~ control unit; and

means for spontaneously sending a message in response to a variation of ~~at least one of the data provided by a the peripheral unit units controlled by a respective said each~~ control unit.

12. (*Currently Amended*) An apparatus according to claim 11, wherein said peripheral units are devices ~~device is a device~~ for receiving, transmitting and processing signals in radio link systems.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No.: 10/006,583

13. *(Previously Presented)* A computer program comprising program code adapted to perform the steps of the method according to claim 1 when said program is run on a computer.

14. *(Previously Presented)* A computer-readable medium having a program recorded thereon, said computer readable medium comprising computer program code adapted to perform the steps of the method according to claim 1 when said program is run on a computer.